

***ASPHALT PAVEMENTS
AND
SURFACE TREATMENTS***

Asphalt Pavements and Surface Treatments

SECTION 400 - ASPHALT PAVEMENT GENERAL

General: Contractor Quality Control and Testing - All allowances shall be subsidiary to other pay items. Generally contractor quality control is applicable for Items 403 through 406, 409, 410, and 412. Contractor sampling is applicable for Items 407, 408, and 413. Refer to FSSS 154 for details. Refer to "Asphalt Products" (Table 400-2) for price data.

SECTION 403 - HOT ASPHALT CONCRETE PAVEMENT (Contract Item)

Estimates should be based upon current local prices, remoteness and size of project, haul distance of materials, adequacy of worksite, etc.

Compare the cost of on-site production with feasible commercial sources in the area. Move-in and move-out costs of a portable plant will often control prices on small projects.

The in-place compacted density and asphalt content used for calculating quantities should be based on a preliminary mix design. In lieu of other information, use 150 pounds per cubic foot for in-place compacted density and 6.5 percent asphalt cement based on weight of total mix.

Add \$10 to \$15 per ton of asphalt if antistripping additive is required.

SECTION 410 – SLURRY SEAL (Contract Item)

Obtain costs from supplier.

SECTION 411 - PRIME COAT (Contract Item)

Obtain current quotes from local suppliers. Asphalt costs dependent upon quantity and location. For application rates see "Application Rate Tables" (Table 400-1).

For price data see "Asphalt Products" (Table 400-2)..

SECTION 412 - TACK COAT (Contract Item)

Costs dependent upon quantity and location. . Ensure surface preparation and brooming cost are included in quoted price, if not make allowances for this work..

For application rates see "Application Rate Tables" (Table 400-1).

For price data see "Asphalt Products" (Table 400-2).

SECTION 414 – ASPHALT PAVEMENT CRACK AND JOINT SEALING (Contract Item)

Obtain costs from supplier.

SECTION 415 – PAVING GEOTEXTILES (Contract Item)

Obtain costs

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SECTION 409 – ASPHALT SURFACE TREATMENT (Contract Item)

Aggregate. Costs are dependent upon quantity and location. Include the following:

Crush and Stockpile: (See Cost Guide Section 301) Crushing costs can vary widely depending on the gradation selected, whether aggregates are produced as a by-product of other crushing operations or produced separately, and availability of commercial sources.

Chips: average weight is 2300 lbs/ cy (loose).

Loading Aggregate: (See Cost Guide Section 301)

Weighing: (platform scales) Include cost for scale move-in, set-up and certification (See Cost Guide Section 151). If bin or belt scales are used, allow \$500-\$1000 for certification. For small projects consider using lump sum or cubic yard measurement.

Hauling: (See Cost Guide Section 204)

Road Surface Preparation, Brooming & Other Prep Work: (if req'd) Estimate the number of passes for power broom. (Travel speed of 5-7 miles per hour). Rough cost \$0.065/ sq. yd.

Aggregate Application: Include cost of self-propelled aggregate spreader and truck time while waiting and spreading.

Rolling: Immediately after application of aggregate. Estimate using pneumatic-tired roller (self-propelled).

Traffic control: Determine if traffic count and type of traffic warrant the need for pilot car and/ or flag persons. Special or unusual construction signing should also be considered.

Surface Maintenance: Determine maintenance and brooming during and at the end of the curing period.

Temporary Centerline Marking: (See Cost Guide Section 634)

Bituminous Material.

Obtain current quotes from local suppliers. Asphalt costs are dependent upon quantity and location.

Refer to the FP-03 specifications for Application Rates for emulsified and liquid asphalts.

Application cost of \$10 to \$15 per ton of bituminous materials for uninterrupted work. Consider location of tanker trucks or temporary storage tank and time to re-fill distributor. Small, irregular areas such as in campgrounds or parking areas should be estimated using hourly rates for a distributor and hand spraying.

Add \$10 to \$15 per ton of liquid asphalt for antistripping additive, if required for cut-back asphalts.

Bituminous Surface Treatments and Seal Coats Using Emulsified Asphalts

Refer to the FP-03 specifications for Application Rates for emulsified and liquid asphalts.

For estimating use the highest rates for aggregate and asphalt emulsion shown for the type of treatment desired.

Final rates should be determined by testing the aggregate after contract award - coordinate with RO Materials Engineering Center for assistance.

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Use rock size (gradation) that is similar to local State requirements to obtain more competitive bids.

For campgrounds and administrative sites that have a buildup of dirt and pine needles along the shoulder, increase the costs for cleanup.

SECTION 431 - SEAL FOR LIGHT TRAFFIC PAVEMENTS

Refer to the user notes for the most recent Regional supplemental specification 417 for detailed information on what application rates and options to select based on your project conditions and the desired surface. Cost vary contingent on cost of materials, size of project and condition of pavement. Unit prices should be less for projects over 10,000 square yards and higher for smaller irregular shaped areas that are at least partially covered with duff and pine needles.

Contacting local contractors is recommended if an accurate estimate is desired. Contractors are listed in the Yellow Pages under "Asphalt and Asphalt Products", and under "Pave Materials". When discussing your project with them, the following items should be reviewed.

- The specification requires seal material conforming to Section 417.02. Proprietary products like Seal Master, Tuff Coat, and PermaSeal have met this spec on past projects. If they are not familiar with the spec, you should FAX them a copy.
- Your project size and payment quantity is expressed in square yards, and not square feet.
- The specification application rates are in pounds solids per square yard, and not gallons per square yard.
- A site visit by a local contractor is preferred, so they can get a better idea of the amount of crack filling, pavement surface cleanup required, and etc., etc., needed.

SECTION 432 – ASPHALT PAVEMENT PATCHING (Contract Item)

Obtain costs from local suppliers.

End of Asphalt Pavements and Surface Treatments